# Forecasting and Risk

BANA 4090

*08/25/2022*

# About me



- Ph.D. Candidate in Business Analytics.
- Applied statistician, business practitioner.
- Foodie and more.... 😄

# About you

- What are you reading right now?

- What type of job do you hope to hire into after program?

- What industry do you hope to work within after the program?

- What is your experience with R programming?

# What this course is about

- Thinking with Data

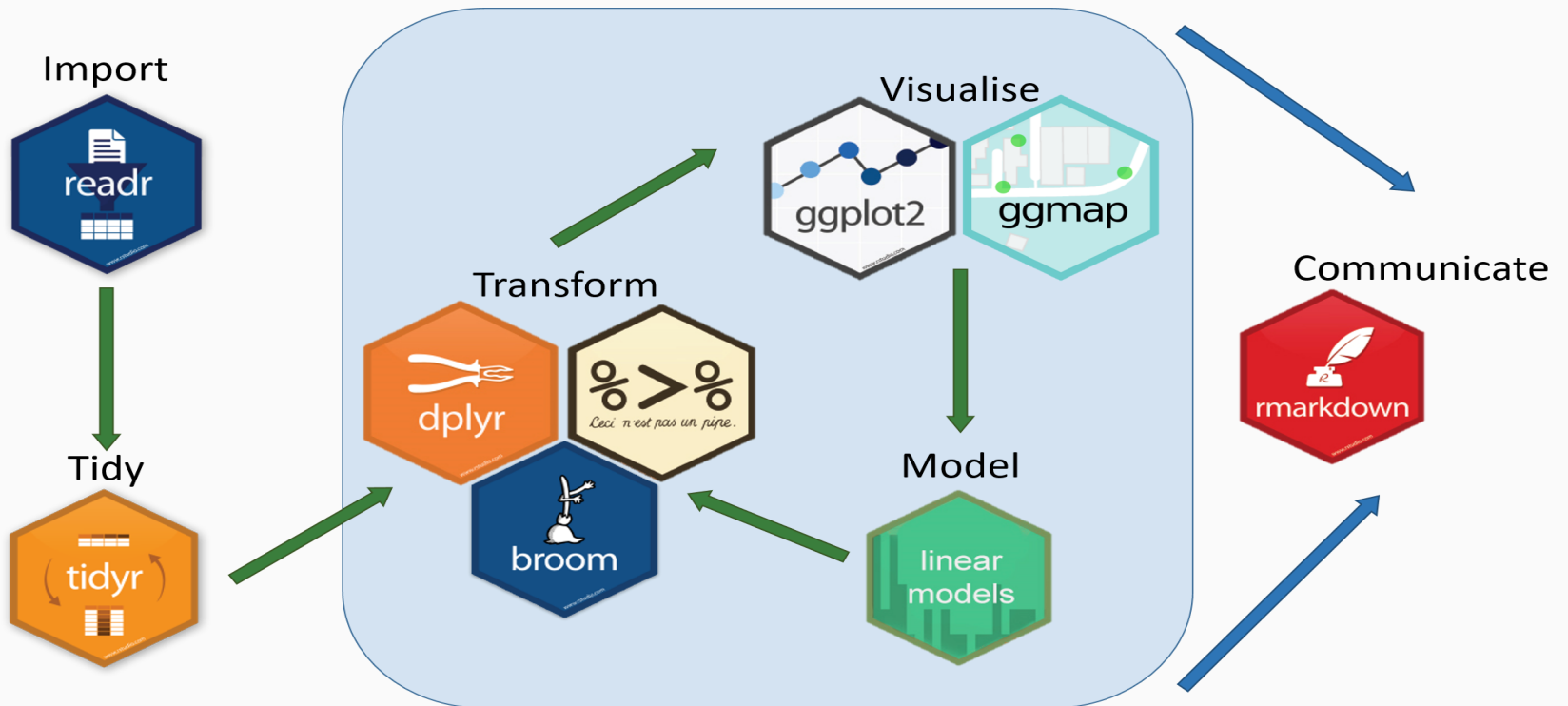- Storytelling with Data

# Objectives

- Have fun – approach analytics with curiosity and collaboration

- Equip students with proper foundation to approach data analysis and data-driven projects

    - Framework for approaching analytics projects
    - Understanding of traditional and modern approaches to analytics
    - Exposure to common challenges within business and how to overcome

- Provide of project for portfolio

- Practice with R programming language as it relates to data

# Teaching principles

- Focus on what you need to succeed in the workplace

- Learn through practice and discussion – Labs, consistent datasets as we learn

- Interesting problem – Real-world Project

# Part 1: Introduction

# Data science pipeline

Import

Visualise

ggplot2  ggmap

Transform

dplyr  *Ceci n'est pas un pipe.*

Communicate

rmarkdown

Tidy

tidyr

broom

Model

linear models

- Tidyverse packages include all the packages required in the data science workflow, ranging from data exploration to data visualization.

# R: Hello, world!

## Output

```
## [1] "Hello World!"

## [1] 15

`
```

## Code

```r
print("Hello, world!")
x ← 10
y = 5
x+y
```

Questions? 😄